

Title (en)

OPTICAL CONNECTOR MODULE AND METHOD FOR MANUFACTURING OPTICAL WAVEGUIDE SUBSTRATE

Title (de)

OPTISCHES VERBINDUNGSMODUL UND VERFAHREN ZUR HERSTELLUNG EINES OPTISCHEN WELLENLEITERSUBSTRATS

Title (fr)

MODULE DE CONNECTEUR OPTIQUE ET PROCÉDÉ DE FABRICATION D'UN SUBSTRAT DE GUIDE D'ONDES OPTIQUE

Publication

EP 3916443 A4 20221019 (EN)

Application

EP 20745896 A 20200117

Priority

- JP 2019010561 A 20190124
- JP 2020001610 W 20200117

Abstract (en)

[origin: EP3916443A1] An optical connector module (1) according to the present disclosure includes an optical waveguide board (10) and an optical connector (20) attached to the optical waveguide board (10). The optical connector (20) includes a positioning target portion (23) that engages with the optical waveguide board (10), and the optical connector (20) is positioned relative to the optical waveguide board (10) in a state in which the positioning target portion (23) is engaged with the optical waveguide board (10). The optical waveguide board (10) includes an optical waveguide (12) including a first cladding (122a) and a core (121) stacked on the first cladding (122a), the first cladding being stacked on a substrate (11) in a stacking direction perpendicular to the substrate (11), and a positioning core (14) that is stacked on the first cladding (122a) by using a material the same as a material of the core (121) and that engages with the positioning target portion (23). The positioning core (14) protrudes further than the core (121) toward a side opposite to the substrate (11) in the stacking direction.

IPC 8 full level

G02B 6/136 (2006.01); **G02B 6/30** (2006.01); **G02B 6/36** (2006.01); **G02B 6/38** (2006.01)

CPC (source: EP KR US)

G02B 6/122 (2013.01 - KR); **G02B 6/136** (2013.01 - KR); **G02B 6/30** (2013.01 - EP KR US); **G02B 6/4228** (2013.01 - US);
G02B 6/423 (2013.01 - US); **G02B 6/3885** (2013.01 - EP); **G02B 6/3897** (2013.01 - EP)

Citation (search report)

- [XDI] US 2009162004 A1 20090625 - JOHNSON IAN DAVID [GB], et al
- [A] US 5539848 A 19960723 - GALLOWAY DAVID [US]
- [A] WO 2017212861 A1 20171214 - KYOCERA CORP [JP]
- See also references of WO 2020153276A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3916443 A1 20211201; EP 3916443 A4 20221019; CN 113348390 A 20210903; CN 113348390 B 20230919; JP 2020118870 A 20200806;
JP 7138056 B2 20220915; KR 102662752 B1 20240503; KR 20210105974 A 20210827; KR 20240064025 A 20240510;
US 2022082760 A1 20220317; WO 2020153276 A1 20200730

DOCDB simple family (application)

EP 20745896 A 20200117; CN 202080010846 A 20200117; JP 2019010561 A 20190124; JP 2020001610 W 20200117;
KR 20217023341 A 20200117; KR 20247014207 A 20200117; US 202017425289 A 20200117